REMARKS

Applicant respectfully requests the Examiner's consideration of the present application, as amended.

Summary of Office Action

Claims 1-23 are pending.

The disclosure was objected to due to informalities.

Claims 1-2, 4, 6, 13, 15, and 17 were rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 4,709,388 of Defretin ("Defretin").

Claims 3 and 14 were rejected under 35 U.S.C. § 103 as being unpatentable over Defretin and U.S. Patent No. 5,926,544 of Zhou ("Zhou").

Claims 5, 7, 16, and 18 were rejected under 35 U.S.C. § 103 as being unpatentable over Defretin in view of U.S. Patent No. 5,854,550 of Knollman ("Knollman").

Claims 8, 9, 19, and 20 were rejected under 35 U.S.C. § 103 as being unpatentable over Defretin in view of Knollman and further in view of U.S. Patent No. 5,881,129 of Chen, et al. ("Chen").

Claims 10-12 and 21-23 were rejected under 35 U.S.C. § 103 as being unpatentable over Defretin in view of U.S. Patent No. 6,263,016 of Bellenger ("Bellenger").

Summary of Amendments

The specification was amended at page 9, lines 10-13 to reflect the appropriate character reference number indicated in Figure 3. Claims 1 and 4

were amended. Applicant respectfully submits that the amendments to the claims and the specification do not add new matter.

Response to objection to the disclosure

The Examiner objected to the disclosure at page 9, lines 10-13 which referred to SLIC linefeed driver "300" instead of "310" as used in Figure 3 of the drawings. Applicant has amended the specification to replace every occurrence of "300" with –310-- in the indicated paragraph.

Applicant respectfully submits the objections to the disclosure have been overcome.

Response to 35 U.S.C. § 102 rejections

Claims 1-2, 4, 6, 13, 15, and 17 were rejected as being anticipated by Defretin.

In particular, the Examiner stated that Defretin teaches:

> Low tension circuit CIBT having sense inputs for a sensed tip signal and a sensed ring signal (sd via 30, 32, 34, 36) of a subscriber loop, wherein the integrated circuit (by microprocessor) generates a subscriber loop linefeed driver control signal (sc) in response to the sensed signals, wherein the linefeed driver (preamplifiers and output stages 18, 20, 22, 24 respectively of high tension circuit CIHT) does not reside within a same integrated circuit.

(4/10/2003 Office Action, pp 2-3)

Applicant traverses the Examiner's characterization of Defretin. Applicant notes that the tip and ring signals are not sensed or received by the "low tension circuit" CIBT nor does the CIBT have sense inputs for either a sensed tip signal or a sensed ring signal as alleged by the Examiner.

Sense inputs 30, 32, 34, 36 identified by the Examiner *clearly* reside within Defretin's high tension integrated circuit CIHT (Defretin, Fig. 1). Moreover, these sensed signals are *clearly not* provided to the low tension integrated circuit CIBT. Instead, these signals are provided to Defretin's current measuring circuit 38 (residing within the high tension integrated circuit) which generates the signal *sd* for the low tension integrated circuit. (Defretin, col. 3, line 26 - col. 4, line 11). Applicant submits that there is no teaching or suggestion that either the sensed ring signal or the sensed tip signal is provided to Defretin's low tension integrated circuit.

Referring to col. 4, lines 5-11, Defretin states "In so far as the invention is more particularly concerned, it may be considered that information *sd* is information relating to the fact that the handset has been lifted or replaced at the other end of the line. This information may in fact be obtained by measuring the DC component which may be present in the transverse line current". Applicant submits that at best this suggests that the "current measuring circuit" calculates the transverse line current in order to generate or calculate *sd*. The calculated *sd* is provided to the low tension integrated circuit. Applicant submits that *sd* is neither the sensed tip current nor the sensed ring current as alleged by the Examiner. Certainly Defretin does not teach providing both the sensed tip signal and the sensed ring signal to the low tension integrated circuit as alleged by the Examiner.

Applicant respectfully submits that Defretin does not teach or suggest *an integrated circuit having sense inputs for a sensed tip signal and a sensed ring signal of a subscriber loop, wherein the integrated circuit generates a control signal for a*

subscriber loop linefeed driver in response to the sensed signals, wherein the linefeed driver does not reside within a same integrated circuit.

The Examiner is free to analogize either Defretin's "high tension" or "low tension" integrated circuit to applicant's claimed integrated circuit. Applicant respectfully submits, however, that the Examiner has not shown that all the claim limitations are found in either analogy. In short, Defretin does not teach or suggest an integrated circuit that receives sensed tip and ring signals AND generates control signals for the linefeed driver in response to the sensed tip and ring signals.

For example, if Defretin's "low tension integrated circuit" is analogized to applicant's claimed integrated circuit, Defretin fails to teach or suggest that the "low tension integrated circuit" CIBT receives the sensed tip and ring signals as claimed by applicant. To the contrary, Defretin's high tension integrated circuit CIHT clearly senses the tip and ring signals and subsequently provides only a calculated signal *sd* to the low tension integrated circuit CIBT.

In contrast, if Defretin's "high tension integrated circuit" CIHT is analogized to applicant's claimed integrated circuit, Defretin's CIHT does not generate the linefeed driver control signals. To the contrary, the linefeed driver control signals (e.g., *sv, sc*) are generated by the low tension integrated circuit CIBT.

Thus applicant submits *Defretin does not teach or suggest an integrated circuit having sense inputs for a sensed tip signal and a sensed ring signal of a subscriber loop, wherein the integrated circuit generates a control signal for a subscriber loop linefeed*

driver in response to the sensed signals, wherein the linefeed driver does not reside within a same integrated circuit.

In contrast, claim 1 includes the language:

> 1. *An integrated circuit package comprising:*
> *an integrated circuit having sense inputs for a sensed tip signal and a sensed ring signal of a subscriber loop, wherein the integrated circuit generates a control signal for a subscriber loop linefeed driver in response to the sensed signals, wherein the linefeed driver does not reside within a same integrated circuit.*

(Claim 1, as amended)(*emphasis added*)

Claim 13 similarly includes the language:

> 13. An apparatus comprising:
> *an integrated circuit generating subscriber loop control signals in response to a sensed tip signal and a sensed ring signal of a subscriber loop, the sensed tip and ring signals received by the integrated circuit;* and
> a linefeed driver for driving a subscriber loop in accordance with the subscriber loop control signals, the linefeed driver providing the sensed tip and ring signals.

(Claim 13)(*emphasis added*)

With respect to claim 4, Defretin's linefeed driver CIHT provides a signal *sd* instead of the sensed tip and ring signals to the low tension integrated circuit. Applicant thus submits Defretin does not teach or suggest a linefeed driver that provides sensed tip and ring signals to an integrated circuit that generates linefeed control signals for the linefeed driver. Although Defretin's ring and tip signals are sensed by an integrated circuit (CIHT), it is not the same integrated circuit that is generating the linefeed driver control (CIBT).

In contrast claim 4 includes the language:

> 4. A subscriber loop linefeed driver comprising:
> *sense circuitry providing a sensed tip signal and a sensed ring signal to an integrated circuit,* wherein the sensed tip and ring signals correspond to a tip current and a ring current of the subscriber loop; and

power circuitry for providing battery feed to a ring node and a tip node of a subscriber loop in accordance with a control signal generated by the integrated circuit in response to the sensed tip and ring signals.

(Claim 4, as amended)(*emphasis added*)

Applicant thus respectfully submits claims 1, 4, and 13 are not anticipated by the cited reference under 35 U.S.C. § 102. Given that claims 2-3 depend from claim 1; claims 5-12 depend from claim 4; and claims 14-23 depend from claim 13; applicant submits that claims 2-3, 5-12, and 14-23 are likewise not anticipated by the cited references.

Applicant submits that the rejections under 35 U.S.C. § 102 have been overcome.

Response to 35 U.S.C. § 103 rejections

Claims 3, 5, 7-12, 14, 16, and 18-23 were rejected as being unpatentable over various combinations of Defretin, Zhou, Knollman, Chen, and Bellenger. Each of the Examiner's rejections relies on Defretin in combination of one or more references.

The Examiner is welcome to review the detailed arguments regarding Zhou, Knollman, Chen, and Bellenger that were presented in response to the Office Action dated July 5, 2002. However, applicant notes that the patentability of independent claims 1, 4, and 13 in view of Defretin has been argued above and that Zhou, Knollman, Chen, and Bellenger have not been asserted in this Office Action against any independent claims. Applicant submits that if an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom

is nonobvious. (see MPEP § 2143.03 citing *In re Fine*, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Given that independent claims 1, 4, and 13 are patentable over Defretin for the reasons cited above (and that no rejection of any independent claim under 35 U.S.C. § 103 has been asserted), applicant submits that dependent claims 2-3, 5-12, and 14-23 are patentable under 35 U.S.C. § 103 in view of the cited references. Accordingly, applicants submit that all of claims 1-23 are patentable under 35 U.S.C. § 103 in view of the cited references.

Applicant submits that the rejections under 35 U.S.C. § 103 have been overcome.

Conclusion

In view of the amendments and arguments presented above, applicant respectfully submits the applicable rejections and objections have been overcome. Accordingly, claims 1-23 as amended should be found to be in condition for allowance.

If there are any issues that can be resolved by telephone conference, the Examiner is respectfully requested to contact the undersigned at **(512) 858-9910**.

Respectfully submitted,

Date July 31, 2003

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